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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/730,698

12/08/2003

Jason D. Hanzlik

10395US01

3984

7590

07/11/2006

Imation Corp.

PO Box 64898

St. Paul, MN 55164-0898

EXAMINER

HAUGLAND, SCOTT J

ART UNIT

PAPER NUMBER

3654

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/730,698

Applicant(s)

HANZLIK ET AL.

Examiner

Scott Haugland

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-11,14-18 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-11,14-18 and 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/8/06 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, and 5-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language of claim 1, lines 7-8 is unclear or inaccurate. It is not clear how the teeth 56, 128 can be considered extensions of the tape winding surface since they are not contiguous with the winding surface. The winding surface appears to be the radially outer surface of hub 50, 132 that normally contacts wound tape.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 6, 10, 14, 15, 17, 23, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Morita et al (U.S. Pat. Appl. Pub. No. 2002/0158161).

Morita et al discloses a tape reel assembly for a data storage tape cartridge comprising: a hub 4, 6, 21 defining a tape winding surface, a flange 22, 23 extending in a radial fashion from an end of the hub, and teeth (teeth on gear 42; teeth 63) formed from a polymer including a lubricating additive (par. 119, p. 5).

With regard to claim 1, the teeth are integrally formed with the hub (i.e., portion 4 of the hub). The teeth are seen to be extensions of one of the opposing ends of the tape winding surface to the extent that the teeth in Applicants' tape reel assembly are.

The teeth on gear 42 and teeth 63 are seen to be outwardly projecting relative to one of the ends of the tape winding surface as recited in claim 17 since they both point in a direction that leads away from the surface.

The teeth of hub portion 4 are seen to be driven teeth since they are driven upwardly (e.g., in Figs. 2 and 3) when drive means 11 engages the tape reel assembly, they would be driven by the reel when the cartridge is moved due to inherent play in the connection between protrusion 33 and groove 45 in the restraining member 4, and they

are capable of being driven in rotation about the central axis of the restraining member 4 when it is appropriately mounted. The teeth 63 of hub portion 6 are driven upwardly when drive means 11 engages the tape reel assembly and are driven to rotate by the drive means 11 during normal recording/reproducing operation of the tape reel assembly.

With regard to claims 5, 14, and 23, Morita et al discloses that the lubricating additive is polytetrafluoroethylene, silicone, etc. (par. 119, p. 5).

With regard to claims 6 and 15, Morita et al discloses that the polymer is glass-filled polycarbonate (par. 119, p. 5).

With regard to claim 10, the teeth 42, 63 are extensions of the end of the hub 4, 6, 21. Note that Morita et al discloses a housing 3 forming an enclosed region containing the tape reel assembly and that the teeth on gear 42 and the teeth 63 are exposed within the opening 32a in the housing.

Claims 2, 7-9, 11, 16, 18, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita et al (U.S. Pat. Appl. Pub. No. 2002/0158161) as applied to claims 1, 6, 10, 15, and 17 above, and further in view of Boutni (U.S. Pat. No. 4,749,738).

Morita et al is described above.

Morita et al does not disclose a polymer including up to 25%, 2-10%, or 5% by weight of lubricating additive. Morita et al does not disclose polycarbonate that is 20% glass-filled and containing approximately 5% by weight of polytetrafluoroethylene.

Boutni teaches forming machine elements including gears of a compound comprising polycarbonate, 20% glass fiber, and 5% polytetrafluoroethylene (see example 9, col. 10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the teeth of the reel assembly of Morita et al of a polymer having 5% polytetrafluoroethylene lubricant as taught by Boutni to provide the teeth with good strength and wear resistance.

Response to Arguments

Applicants' arguments filed 6/8/06 have been fully considered but they are not persuasive.

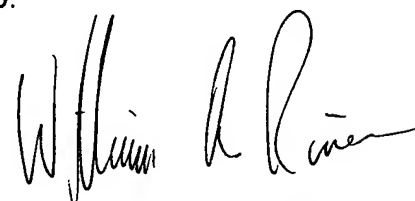
Applicants argue that Morita does not teach or suggest driven teeth integrally formed by a hub as an extension of one of the opposing ends of a tape winding surface that define an engagement surface, where the driven teeth are formed from a polymer including a lubricating additive as recited in claim 1. However, to the extent that claim 1 clear, Morita is seen to meet it. None of the claims require teeth of gear 24 of Morita to be formed of a polymer that includes a lubricating additive. The teeth 63 and those on gear 42 of Morita are integrally formed with the hub that includes elements 4, 6, 21 of Morita. Even if the claims did include such a limitation, it would have been obvious to form teeth of gear 24 of the same material as elements 4 and 6 to provide wear resistance which would be important for the driving gear 24 as well as for elements 4 and 6.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


sjh
7/6/06


WILLIAM A. RIVERA
PRIMARY EXAMINER